Title (en)

REAL-TIME VIDEO DEBLURRING

Title (de)

ECHTZEIT-VIDEOSCHARFSTELLUNG

Title (fr)

CORRECTION DE FLOU VIDÉO EN TEMPS RÉEL

Publication

EP 2454876 A4 20121031 (EN)

Application

EP 09850665 A 20091021

Priority

US 2009061542 W 20091021

Abstract (en)

[origin: WO2011049565A1] A method of reducing blurring in an image of size greater than M columns by N rows of pixels, comprises deriving a blur kernel k representing the blur in the image, and deriving an inverse blur kernel k-1. The inverse blur kernel is given by (I) where h(m) is the sum of the first m terms of the series (II) d is the Dirac delta, m is greater than 1, and h(m) is a two dimensional matrix of size M x N. The two dimensional matrix h(m) is convolved with the image over the whole image in the image pixel domain to produce an image with reduced blur. The method may be applied to a video sequence allowing the sequence of images to be deblurred in real time.

IPC 8 full level

G06T 5/00 (2006.01); **H04N 5/21** (2006.01)

CPC (source: EP US)

G06T 5/73 (2024.01 - EP US); G06T 2207/10016 (2013.01 - EP US); G06T 2207/20182 (2013.01 - EP US); G06T 2207/20201 (2013.01 - EP US)

Citation (search report)

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- [A] US 2008025627 A1 20080131 - FREEMAN WILLIAM T [US], et al
- [A] CAI J F ET AL: "Blind motion deblurring using multiple images", JOURNAL OF COMPUTATIONAL PHYSICS, LONDON, GB, vol. 228, no. 14, 1 August 2009 (2009-08-01), pages 5057 - 5071, XP026157870, ISSN: 0021-9991, [retrieved on 20090503], DOI: 10.1016/J.JCP.2009.04.022
- See also references of WO 2011049565A1

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EP3929864A1; WO2021259994A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

US 2009061542 W 20091021; EP 09850665 A 20091021; US 200913387333 A 20091021